

THE NINTH ANNUAL CHARLES V. CHAPIN ORATION*

BODY FLUIDS AND THE RATIONALE OF FLUID THERAPY

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I so greatly appreciate the honor of being asked to give the Chapin Oration that I did not confess that I have no oratorical prowess. So now I am embarrassed by being obliged to use lowly language in discussing the body fluids which deserve to be dealt with eloquently.

For the purposes of this talk, the body fluids will be considered as two anatomical and physiological entities; extracellular and intracellular fluid. As shown by this crude diagram (Figure 1), extra-

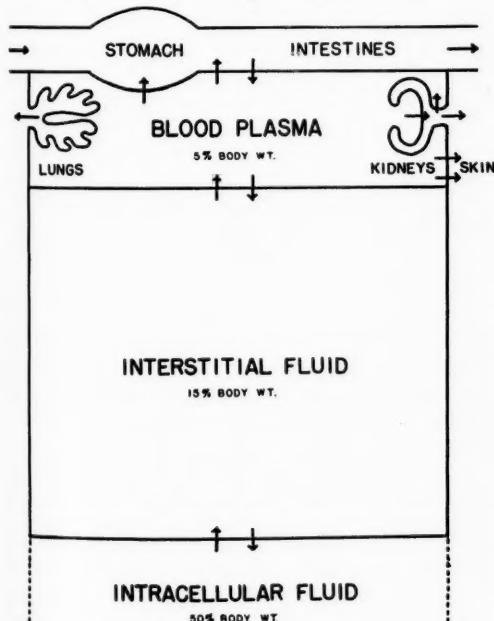


FIG. 1

cellular fluid is composed of the blood plasma and the interstitial fluid which lies between the vascular compartment and the tissue cells of the body. As regards dimensions, extracellular fluid may be taken as about 20% of body weight and intracellular fluid as 50%.

Having used the word entity, we must at once qualify it by acknowledging an intimate functional relationship between these two fluids, a main feature of which we will now consider. In order that chemical events within the tissue cells may proceed correctly it is necessary that physical conditions such as temperature, reaction and osmotic pressure be held closely stationary. This requirement is understandable if we recall that the rates at which various processes of chemical change proceed are differently altered by change in physical circumstances. So it is evident that the almost innumerable chemical transactions which together accomplish what we call metabolism would rapidly fall out of adjustment if physical conditions were not approximately constant.

The stability of physical properties in cell fluid rests on the degree of their constancy in extracellular fluid. We owe to Claude Bernard recognition of this requirement by the tissue cells for environmental constancy and the concept of extracellular fluid as our immediate or, as he called it, our internal environment. Biological history clearly sustains this concept. According to geological record the early forms of life developed in the pre-Cambrian ocean. There, so we are told, occurred for the first time an aggregation of substances which exhibited a continuous and automatically stabilized chemical activity. We can easily postulate as the required basis for this rather delicate chemical experiment a constancy of physical properties in the surrounding medium. This sea water excellently provided. Sea water is a so-called buffered solution because it contains the weakly acid substance carbonic acid and its alkaline salt bicarbonate. This

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pair of substances provides the required stability of reaction. The total concentration of substances is immovable because the ocean is so big and so its osmotic value is fixed. Temperature is also nearly constant. Then of course sea water is mostly water and according to Lawrence Henderson water has an incomparable biological fitness. By this word "fitness" we are to understand, I suppose, a suitability of the many components of the Great Experiment which was eventually so successful as to produce a Lawrence Henderson.

To continue our Just So story. Before our extremely remote ancestors could come ashore to enjoy their Eocene Eden or their Paleozoic Palm Beach, it was necessary for them to establish an enclosed aqueous medium which would carry on the role of sea water. This is what extracellular fluid is and does. It replaces sea water in performing two important services to the organism; the transport of nutrient and waste materials which is a simple task and the preservation of environmental physico-chemical constancy, which is a very intricate assignment.

The establishment of an enclosed aqueous medium in which physical properties are held closely stationary in the presence of a widely fluctuant demand for transport of many and various chemical substances was a large undertaking. Besides an intrinsic suitability of the medium itself it required the invention of quite a lot of apparatus. An obviously necessary piece of equipment was a pump to stir and propel the medium. The necessary transactions with our external gaseous environment also had to be arranged for. Besides the heart and the lungs, another very remarkable organ of regulation had to be devised before the internal medium could be established. The kidney is often referred to as an organ of excretion. This is a very inadequate and disrespectful designation. Were the removal of waste substances its only service a much simpler organ would suffice. The structural and functional complexity of the kidney is required for the preservation of an approximately constant chemical pattern in extracellular fluid. McCallum, regarding the establishment of the enclosed aqueous environment as the largest forward step in the history of the animal organism, has described the kidney as the organ par excellence of evolution. Since damage to the heart, lungs or kidneys, or to various other organ systems may dangerously disturb our internal environment we may say that the ultimate objective of a large part of medical science is defense of the functional integrity of extracellular fluid against obstacles imposed by disease.

In order to understand the functional performance of a part of the body we must begin by learning its structure. The framework of the body fluids is composed of chemical units called ions which

derive from substances known as electrolytes for the reason that when they enter into solution their molecules fall apart and produce two species of ions one of which carries a positive and the other a negative electrical charge. The ions with a positive charge are called cations and those with a negative charge anions. The cations are the basic radicals and the anions are the acid radicals of the molecules from which they derive. The concentrations of these ions in the body fluids are individually governed and are held at closely stationary values.

The greater part of the framework of the body fluids derives from the inorganic salts of the food intake. These inorganic ions being nonoxidizable have a suitable durability for their structural rôle. But this framework also contains two important organic components protein and carbonic acid.

The electrolyte composition of extracellular fluid is described by the two middle diagrams on this chart (Figure 2). The normal values for the

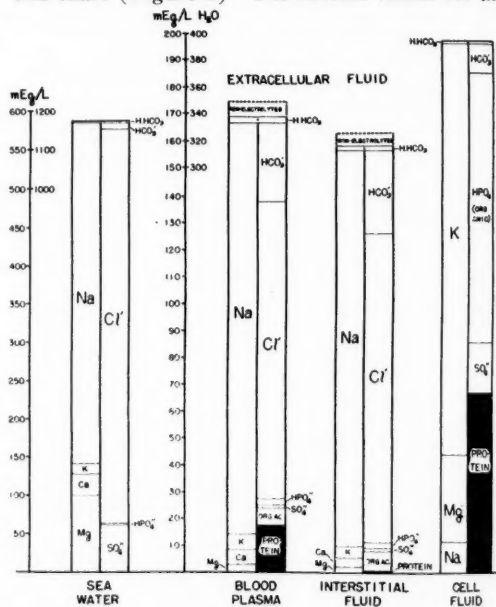


FIG. 2

individual cations or potential base in terms of their chemical equivalence are super-imposed in the left hand and those for the anions or acid radicals in the right hand column, and, as you see, the columns are of equal height.

The purpose of these two diagrams is to display the almost identical ionic patterns of blood plasma and interstitial fluid. We find only the small differences in concentration of the individual components which is referable in terms of osmotic law to the much larger quantity of the non-diffusible component protein in the plasma. So that although extracellular fluid lies in two compartments it is quite clearly a continuous medium.

A value for the sum of the concentrations of the non-electrolytes, such substances as urea and glucose which do not dissociate into their component ions, is placed across the top of the diagram. As you see, they occupy a relatively small amount of space although a larger quantity of these substances than of the electrolytes is transported daily by extracellular fluid. All that the non-electrolytes ask for is expeditious conveyance. The electrolytes on the other hand while they are being transported compose, as we have said, a chemical structure which determines the physical properties of extracellular fluid. This is the meaning of the large prominence of the electrolytes.

The history of extracellular fluid is clearly indicated by the resemblance of its ionic pattern to that of sea water shown by the first diagram. We find the same set of inorganic components in roughly the same relative amounts. The chemical skeleton of sea water is thus plainly visible in extracellular fluid. The total electrolyte concentration of present day sea water is, as shown by the ordinates, several times that of extracellular fluid. But this is an easy hurdle for the biological historian since we know that the salinity of the sea has been steadily increased over the eons by salts carried into it by the rivers of the land and so it is a simple surmise that the concentration of electrolytes which we find in extracellular fluid measures the value for sea water at the time that our internal environment was established.

So we find that the animal organism carries on in the same aqueous medium in which it began. It is rather surprising that being an inveterate experimentalist, it has refrained from tinkering with its original environment once it got it enclosed. Instead, it has spent an immense ingenuity on accurately preserving its Cambrian cradle. The biological sanctity of this solution of several simple salts is very impressive. Apparently not only did it permit the inception of the experiment which we call life but remains its inviolable basis.

That the animal organism can do what it likes with the electrolytes behind the boundaries of protoplasm is shown by the last diagram which describes the electrolyte structure of intracellular fluid. Here the large cation component is potassium instead of sodium and on the anion side we find phosphate instead of chloride and a large concentration of protein. So we have these two fluids separated by a gossamer curtain, the cell boundary, which have altogether different ionic patterns in defiance of the known laws of diffusion of electrolytes across a membrane. To the physical chemists this is a major biological marvel. At any rate we can say that, however it has been achieved, it is the basis of the privacy of protoplasm.

Having said that the stability of biochemical processes rests on the physico-chemical constancy of our internal environment, we will now attempt to indicate very briefly the relation of the chemical structure of extracellular fluid to the important physical properties which we call reaction and osmotic pressure. This we can observe in the accessible portion of extracellular fluid; the blood plasma.

The first diagram on this chart (Figure 3) describes the normal electrolyte structure of the

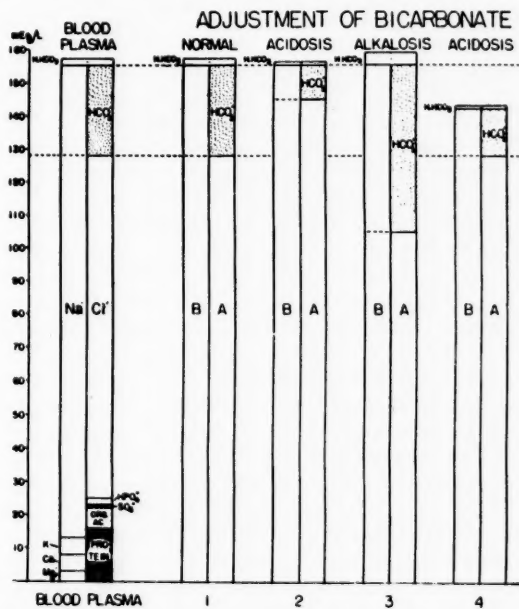


FIG. 3

plasma. It may be well to note here that each of its components has a particular physiological assignment which requires a closely stationary concentration. Collectively they compose a chemical structure which determines the reaction and the osmotic pressure of the plasma.

We will first consider the relation of this structure to reaction. The reaction of the plasma rests, as regards its immediate control, on the relative concentrations of the weakly acid substance carbonic acid and its alkaline salt bicarbonate. That is, it is the ratio and not the absolute quantities of these substances which determines the concentration of ionized hydrogen which is our measure of reaction. The small concentration of carbonic acid at the top of the diagram is sustained by the respiratory mechanism. Below it is the plasma bicarbonate which is composed of the concentration of bicarbonate ion, — HCO_3 , together with the base which it covers. The normal value for bicarbonate ion, indicated by the speckled bloc, requires integrity of the entire electrolyte structure for which the

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kidney is mainly responsible. That is, a change in any other part or parts of this Ionic or possibly Doric structure will cause a change in bicarbonate. As shown by the other diagrams on the chart, bicarbonate ion is the adjustable component which preserves total cation-anion equality. For instance, if the sum of the other anions (A) is increased we find equivalent reduction of bicarbonate. The displaced bicarbonate ion is released as carbonic acid and falls under the government of the respiratory mechanism. In the next diagram we have recession of the other anions with corresponding extension of bicarbonate. The bicarbonate ion used in this process comes from the carbonic acid which the respiratory mechanism sustains in the plasma at a controlled level. In the last diagram reduction of base causes an equivalent reduction of bicarbonate. These changes in bicarbonate are not permitted to exert their full effect on reaction. As roughly indicated in the diagrams the respiratory mechanism undertakes to alter the normal carbonic acid concentration in the direction which will restore the normal carbonic acid-bicarbonate ratio. This respiratory defense, although it greatly limits change in reaction, usually falls considerably short of complete compensation for the bicarbonate change. So it is evident from the diagrams that study of the pathogenesis of acidosis or alkalosis must consist in first finding the alterations of the normal plasma structure which have caused the bicarbonate change and then explaining if we can the development of these defects in terms of the accompanying circumstances of disease. As you know, the morbid anatomy of the plasma structure is very diverse. Many conditions of disease may cause various distortions with resulting acidosis or alkalosis.

The other important physical property of the plasma, its osmotic pressure, is determined simply by the sum of the concentrations of the individual ions, and this is measured by the height of the diagram. The adjustable component, as we have just seen, is on the anion side and so it follows that the total base concentration will determine the total ionic concentration. This is illustrated in the last diagram which describes hypotonicity of the plasma produced by reduction of total base concentration. In the plasma more than 90% of total base is sodium, and so we find that the stability of the normal osmotic value of the plasma depends almost entirely on the accuracy of renal control of this one large component. So it is perhaps not surprising that the kidney has been given the assistance of an adrenal hormone in this important assignment. This total ionic concentration which the kidney sustains in the plasma establishes the level of osmotic pressure throughout the body fluids.

Now, besides total ionic concentration which determines their osmotic value, the body fluids have another overall dimension, volume. Presumably

there is an optimal volume. It is evident however that preservation of the normal osmotic value has physiological priority. The kidney, so long as it is able to operate accurately, sustains the normal total ionic concentration at the cost if necessary of wide change in volume. If, for instance, pathological processes cause a loss of electrolytes the kidney removes a corresponding quantity of water. If water deficit is the primary event the kidney defends total ionic concentration by removing electrolytes. So we find in the presence of processes of dehydration a parallel loss of water and electrolytes. This has the important therapeutic corollary that body fluid deficits cannot be repaired by water alone.

This brings us to what will have to be a very brief discussion of the rationale of fluid therapy. We will consider only the situation in which there is urgent need for replacement of large losses of the body fluids. Our first premise is clearly defined. We must provide electrolytes along with water, and in those situations in which the patient is unable to accept fluids orally this is accomplished by subcutaneous or intravenous infusion of a suitable isotonic solution of electrolytes. This is an obvious and well established procedure, although we continue to debate what a suitable solution of electrolytes is. There is another requirement which is often neglected or inadequately met; the need for additional water to cover the obligatory expenditures by the body. To this end we use a solution of glucose. The services of glucose solution and of electrolyte solution are thus quite separate. We expect the water which we provide as glucose solution to be spent, whereas the water which we give along with the electrolytes we hope will be retained. This will not be the case unless the obligatory expenditures are completely covered. Moreover, besides the water which glucose solution supplies, the metabolism of glucose provides several physiological benefits which incidentally conserve the body fluids.

So it is evidently important to know how much water and glucose should be provided to cover the obligatory expenditures of water and to gain to a maximal extent the several benefits from glucose. This we may call the physiological requirement in fluid therapy, and we may note that, in contrast with the variable requirement for replacement of the body fluid losses, it should have a standard value for a subject at rest, and also it must have priority. In this necessarily brief discussion of fluid therapy, I will only undertake to define this requirement. In the course of studies on the life raft ration carried out over the war years in association with Dr. Allan Butler we had an unusual opportunity to measure its components. We were provided with healthy young adult subjects who were cheerfully willing to undergo periods of fasting and the much more severe experience of thirsting.

The measurements of the effects of glucose which produce conservation of the body fluids are recorded on this chart (Figure 4). In these experi-

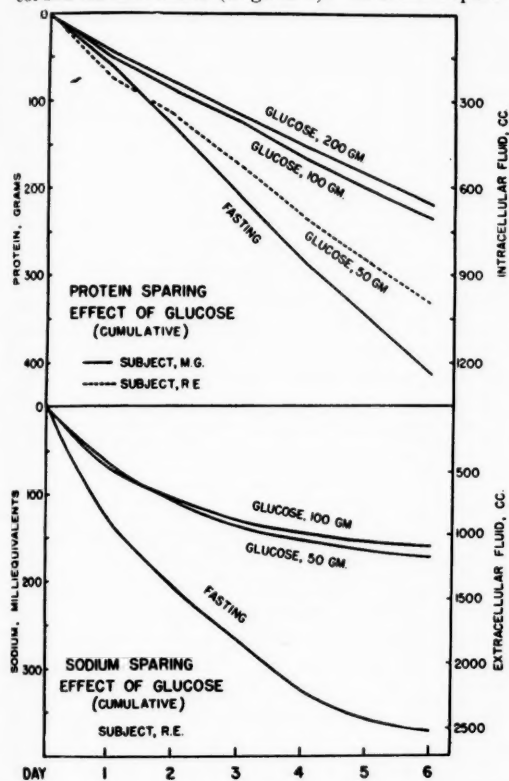


FIG. 4

ments an ample intake of water by mouth was provided over a period of fasting and over subsequent periods during which glucose was given at several levels of intake. The upper section of the chart describes the well known protein sparing effect of glucose. The daily losses of body protein derived from measurement of nitrogen outgo in the urine are recorded additively. The lowermost line describes the progress of consumption of body protein across a 6-day period of fasting. By the end of the period this amounts to about 400 gm. For each gram of protein lost, 3 gm. of water are removed from the body in order to preserve the normal concentration of protein in cell fluid so that this loss of protein defines an accompanying loss of 1200 cc. of intracellular fluid. When an intake of 50 gm. of glucose daily is provided, the loss of body protein is considerably reduced. An intake of 100 gm. brings it to about one-half of the loss found for fasting. A larger intake provides very little further protection of body protein. So we can say that the maximal protein sparing effect of glucose is gained by providing a daily intake of 100 gm.

The lower section of the chart shows an un-

expected effect of glucose; a large sparing of the extracellular base sodium. Over the 6-day period of fasting the loss of sodium was about 400 millimols and defines a removal of about two and one-half liters of extracellular fluid. This loss is reduced by more than one-half by a daily intake of 100 gm. of glucose. Fifty grams is almost as effective. We are unable to explain this effect of glucose, but there it is and, as you see, it extensively conserves extracellular fluid.

Another important effect of glucose is prevention of ketosis which is a prominent feature of fasting and may cause acidosis of quite severe degree. This benefit is completely gained by an intake of 100 gm. daily.

Aside from these physiological effects, a very large elevation of morale was observed when glucose was given. The cheerfulness and sense of physical effectiveness of our subjects was in striking contrast with their unhappy lassitude during the fasting experiments.

Assuming that the same effects would be gained by providing glucose parenterally, these experiments define the requirement for glucose in fluid therapy as 100 gm. per day for an adult. We have next to decide how much water to give along with the glucose in order to cover the obligatory expenditures. There are two items of water outgo; the loss of water insensibly by way of the lungs and skin which has a fixed basal value and the water required by the kidney. Minimal renal expenditure of water is determined by the quantity of substances claiming removal and the maximal ability of the kidney to concentrate them in the urine. With a usual water intake under guidance of the sensation of thirst the kidney is provided with a great deal more water than the physiological minimal. These relationships are shown in the first section of this chart (Figure 5). The kidney's daily excretory assignment is measured as milliosmols, this being the physical

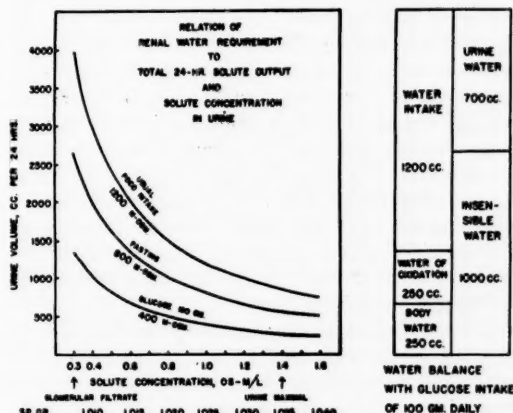


FIG. 5

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chemist's unit of measurement when he wishes to relate the quantities of various substances in a solution to its osmotic value. That is where the -os comes from. Under ordinary circumstances the kidney's daily load may be taken as about 1200 milliosmols. In our fasting experiments it was about 800. Glucose by its sparing effects brings it down to approximately 400. The ordinate of the chart measures the volume of urine required to remove these several loads over the physiological range of concentration of solutes, expressed as os-mols per liter, shown on the abscissa, extending from the concentration in glomerular filtrate which is the same as for the blood plasma, to maximal concentration which may be taken as 1.4 os-molar. For a patient subsisting on 100 gm. of glucose the volume required at a given solute concentration is, because of the smaller load, only one-third as large as under ordinary circumstances. If this load is removed at maximal concentration, the renal water requirement is about 300 cc. It is fair enough to use this minimal quantity as the renal water allowance for a castaway on an emergency ration containing only carbohydrate but for a bed patient, who can easily be provided with water, there is no need to demand of the kidneys the osmotic work which maximal concentration requires. At a usual concentration, which may be taken as 0.6 osmolar, the water requirement is about 700 cc.

The components of the water exchange for a patient receiving 100 gm. of glucose are assembled in the diagram. We found for our subjects at rest an average daily insensible loss of about 950 cc. so we may allow one liter for this expenditure. To cover the outgo column, there is water available within the body to the extent of about 500 cc. This is composed of the loss of body water which is beyond the sparing effect of glucose and also water produced by the oxidation of body fat, protein and the glucose which we have provided. So by difference we find that the quantity of water which we should provide along with 100 gm. of glucose in order to sustain the water balance of the body is defined as 1200 cc. If we use a 5% solution of glucose, 2 liters will be required; and so we will, according to our estimation, provide a large surplus of water. It is not however an inordinate surplus. Moreover it may be importantly serviceable in the event of large extension of the insensible loss by sweating produced by the frequent error of over-covering our very sick patients. So we may accept 2 liters of 5% glucose solution as a convenient statement of what we are calling the physiological requirement in fluid therapy.

I have wished to emphasize the importance of this requirement because I find that its priority is often not recognized. As evidence I may cite a procedure which is completely wrong. The provision of glucose by just dissolving it in the electrolyte

solution. Five per cent glucose in saline is quite commonly used. The benefits from the metabolism of glucose will of course be gained, but no surplus water is provided and so the obligatory expenditures will have to be covered by water taken from the electrolyte solution and the kidney will then be required to remove a corresponding quantity of the electrolytes in order to preserve their normal concentrations in the blood plasma. A large part of the electrolyte solution given to replace body fluid deficits will thus be lost. Obviously this does not make sense. I feel that I should apologize to this audience for even mentioning such an obvious fallacy.

It is appropriate that any discussion of the body fluids should close on a note of admiration of the kidney which is mainly responsible for their integrity. The chart provides opportunity for praise of this remarkable organ. We note the enormous economy of water expenditure that has been gained by the mammalian kidney's ability to secrete urine at a solute concentration which is about five times that of the blood plasma. The curves describe an interesting feature of this economy; it follows a path of diminishing return. For instance, for the 1200 milliosmol load, urine volume required at the concentration of glomerular filtrate is 4 liters. By increasing concentration only as far as 0.6 osmolar, urine volume is reduced to 2 liters. To bring volume down to 1 liter, concentration must be carried all the way to 1.2 osmolar, and beyond this point reduction of volume by further increase in concentration becomes almost negligible. We are told that maximal concentration is determined by a limit to the ability of the kidney to do osmotic work. This may be so, but a more respectful statement would be that the kidney stops concentrating solutes at the point beyond which further expenditure of osmotic work would be wasted. In other words, the end point of renal effort is just where it reasonably should be.

The charts in this paper are reproduced from the author's lecture syllabus, *Chemical Anatomy, Physiology and Pathology of Extracellular Fluid*, published by the Harvard University Press.

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MEDICINE'S CONCERN ABOUT LICENSURE OF MEDICAL RECORD LIBRARIANS*

CHARLES L. FARRELL, M.D.

The Author, Charles L. Farrell, M.D., Pawtucket Rhode Island, Chairman, Committee on Public Policy and Relations, Rhode Island Medical Society; Delegate, American Medical Association.

HUMAN SOCIETIES come under the influence of great tides of thought that run beneath the surface. After a while, these powerful streams of opinion affect certain segments "en masse" without individuals in the mass being aware of the direction in which they are going.

Up to a certain point it is possible to resist these tides—and even stop and reverse them—but there comes a time when they are so strong that we lose the power of decision over them and must rush on and on to the predetermined consequences.

You, who are interested in the licensure and educational training of medical record librarians, are moving along under the dominance of such a tide; and unless you make a determined attempt to control your destiny, you may rush headlong into a future of restricted activity which you, as pioneers in a new, and for many of you an original field—do not by any standard deserve.

It is a typical American trait to invent a product to fit a given situation—to produce a better product than anyone else and then to constantly improve the quality of that product.

Unfortunately, however, in our zeal for higher and higher standards we are prone to embellish the product with commendable but unnecessary furbelows, and to eventually so elevate its sphere of influence that another and secondary product must be made to fill the gap left vacant by the elevation of the first to higher and special fields.

The secondary product then fills the need originally met by the first—and usually at a lower standard than that displayed by the original.

Time was, in Medicine, that the general practitioner handled the ills of all the people—but because a certain but nonetheless limited percentage of his cases required special skills—the role of the specialist was created. Now—the majority of medical school graduates tend to limit their practice exclusively to certain fields—thus creating a licen-

sure problem and the need for special Boards of Certification. This in turn limits the number of workers in the field of general practice—leaving the rural and smaller communities a diminished supply of that backbone of medical care—the family doctor. This gap is then filled with secondary practitioners and cultists who attempt to meet the community needs once filled by the general practitioner of medicine. All of which results in a dilution of the quality of medical care available in the areas of greatest need and raises the cost to the ultimate consumer.

In the ancillary services we have a repetition of the process. The chiroprapist who once filled a definite need for minor and inexpensive services requiring mostly technical and limited training for effectiveness—has gradually expanded by increasing educational requirements until these prerequisites limit the field and increase the cost of education—all of which tends to raise the cost to the ultimate consumer and decrease the number of practitioners. There is no reason to demand that the skill required to immerse a pedal extremity in aqua pura be contingent on an ability to discourse on the philosophy of Aristotle or the drama of Euripides.

In the field of Nursing—the educational expansion has created a group of administrators who, though efficient and learned, leave a gap in the physical care of the patient which in turn is filled by secondary practitioners such as nurses' aides or practical nurses.

Hospitals in turn have followed the trend, and instead of serving the people of the community by placing the hospital facilities at the disposal of the duly licensed medical practitioners in the area, they have—under the guise of elevating standards—required Certification as a basis for services—even in the ordinary fields of endeavor. The hospital was originally a charitable institution operated by local citizens with philanthropic motives. This is still true in some smaller communities and with the religious institutions, but in altogether too many instances the present hospital in the urban area is in Big Business and operated as such. Of late years they have turned to the state for tax money to meet their deficits acquired, they claim, from treating indigent patients.

I am unalterably opposed to state or bureaucratic

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*Presented at the Annual Meeting of the Rhode Island Association of Medical Record Librarians held in Providence, Rhode Island, on May 10, 1950.

control but I am equally sure that *if* hospitals are going to ask the state for money to meet deficits — money which is collected from taxes levied on ALL citizens — then the State has a right and even a duty to inquire as to the "modus operandi" of such hospitals and to further inquire whether or not the hospital practices proper economies — avoids extravagances and utilizes usually accepted business procedure. If state tax funds are to be given hospitals, are not these hospitals in turn obligated to admit all tax payers as patients and permit them to be served by their own physicians, who in turn are likewise taxpayers? It is rank hypocrisy to talk about "Free choice of doctor" when private hospital corporations limit staff membership and even restrict the freedom of its own staff members.

You are fully cognizant of the development of formalized training for medical record librarians and the establishment of your association because of the need for standardization of clinical records.

The prime function of your training then, is to prepare you to keep medical records in such a manner that they may be used in the care of the patient — the compilation of statistics and the development of reports on which medical progress is predicated. In order to properly fill this function a specialized training is necessary and as much more cultural educational background as is possible without, however, so expanding the curriculum as to increase the cost of education in that many able candidates are eliminated — the overall expense increased — thus resulting in turn in higher salaried personnel with limitation of the field.

The success of any educational program is measured by the ability of its licentiates to effectively meet the demands of their environment. If the established and experienced medical record librarians in this state are able to meet the challenge of our modern hospital — and I know they are — they then constitute the best proof that the road they have travelled has been practical and effective so that prompt and proper recognition of such experience and training should be immediately forthcoming by accrediting bodies.

It is an established rule of Law that no licensure regulations are retroactive or restrictive to those already licensed.

Too often, however, we find that special interests in various fields have, with ulterior motives, written rules and regulations designed to curtail and restrict those already in practice in favor of those yet to come. The deplorable feature of this type of thinking is that it establishes precedents which may boomerang later on.

Those — who today feel that they possess the highest and the best of educational qualifications will soon discover that ere they have practiced very long — a new generation with still higher and more

exacting standards enters the field with demands for stricter and tighter controls.

Then we are faced with the recurring necessity of inaugurating a secondary group to do the basic work for which the original group was primarily designed; but which will have become by now — administrative and executive only.

Do you realize that the Medical Secretaries are already on the horizon and do you appreciate the threat of a secondary worker in your field? Do you further appreciate that the field of activity encompassed by medical record librarians was developed and brought to its present state of maturity largely through the efforts of technically trained young women who had the vision to realize the importance of this work?

It is indeed a great tribute to those pioneers that today educational institutions look upon this field as fertile soil for their endeavors — but as they did not initiate this branch of library science, neither should the conferring of belated attention by education be permitted to eliminate or curtail the medical record librarians who through sheer technical skill and natural ability have contributed so materially to the development of this science.

I was present at the hearing before the Council on Medical Education and Hospitals of the American Medical Association when the Essentials of an Acceptable School for Medical Record Librarians was discussed.

The hearing developed unmistakable evidence that the Council did not condition its thinking along the lines adopted by certain advocates of a counter proposal which would, in effect, have barred or at least made it extremely difficult for, pioneers in this field of library science to become Directors of Schools of Training.

At present, in order to be considered for a Director of a Training School — a medical record librarian may be eligible if she has eight years' experience in charge of a medical record library in an approved hospital — and

New Directors appointed after January 1, 1954,

Should have an academic degree from an approved college or university with courses in psychology and teaching methods, plus graduation from an approved medical record librarian's school, and

two years in charge of the medical record library in an approved hospital.

There were forces at work which would have made the above requirements mandatory but I am sure the Council was wise in leaving the wording optional in the use of *Should* instead of *Must*.

I therefore urge you to mark well the progress of the tides that affect your welfare, and I believe that your interests will be best served by continuing to press for the adoption of your proposed amend-

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AMERICAN DEMOCRACY ON TRIAL*

BAIRD H. MARKHAM

The Author, *Baird H. Markham, of New York City, Director, American Petroleum Industries Committee of the American Petroleum Institute.*

ANY MAN would feel honored by an invitation to address this distinguished conference. Speaking for myself, I can say that I have approached this occasion in a spirit of humility. You have honored me, but you have also flattered me by this invitation. For with an audience of such wide learning, the chance is slight that I can tell you anything you don't already know.

But — if I can help you to see in even a little different light the things you do know — at least I shall not have wasted your time or presumed upon your hospitality.

My field — the petroleum industry — is far removed from yours. But my specialty — organization — must also be of great concern to you — or you would not be here.

Knowing how important it is for doctors to have a medical association, you will understand why oil men must also have an organization to promote petroleum research — to supply the layman with facts about the oil industry — and to represent the industry in its broad relations with the public and with government. In short, oil men, like doctors, must have an organization which can serve them and which they — as individuals — can serve.

I should like to emphasize that latter point — an organization which they — as individuals — can serve. Theodore Roosevelt once said: "Every man should devote some part of his time to the building up of the industry or profession of which he is a part."

Is this the counsel of idealism? Is it visionary to suggest that every man owes his business or profession some unselfish time, some time devoted strictly to the promotion of that profession — as distinguished from mere self-promotion?

On the contrary, in our unsettled era this is the most practical and hard-headed advice which can be given. Nothing can stand still these days, and if

* Presented before the Sixth Annual Conference of Presidents and Other Officers of State Medical Associations, at San Francisco, California, June 25, 1950.

men do not work to improve their business or profession, then it will surely slip down — and drag them with it.

Importance of Organization

To the best of my knowledge just about every business, industry, and profession in this country is organized today. People have not formed these organizations just because they are sociable and welcome a chance to get together and talk shop. They have organized because they have learned there is no practical substitute for organization.

The doctors of America discovered the importance of organization in 1847 and formed the American Medical Association. This, of course, was long before the founding of the American Petroleum Institute. In fact, it was more than a decade before the petroleum industry itself came into existence. But by 1919 oil men, too, felt the need for a medium by which they could coordinate their individual efforts for the betterment of their industry. And so the American Petroleum Institute was formed.

I shall not boast to you about the accomplishments of the American Petroleum Institute, proud as I am of them. Nor shall I deny that our organization has sometimes erred in judgment. I do not claim we are perfect — or that the industry we serve is perfect.

Men in the oil business have made mistakes. They have been misrepresented and misunderstood. Unfortunately, these mistakes and misunderstandings have been widely publicized in a world which hears little about the quiet achievements of the great majority of oil men whose activities constantly follow constructive lines.

When an individual of prominence commits a blunder it is front-page news. But when an entire industry makes tremendous technical strides within a few decades, produces a continuously improved product at a reasonable price, meets the challenges of global war, and does not fail the equally great challenges of an expanding post-war economy — If that story is told at all, it is told in a paragraph of two or the inside pages.

You have the same problem in your profession.

I suppose there are few men who lead more dedicated lives than the typical country doctors of our

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land. Yet, barring an event like the birth of quintuplets, how often is the service of the country doctor known outside the circle of his own grateful patients? The same is true of the skilled surgeons and specialists of our great cities. Miracles in medicine are expected of these men, and when performed are treated as matters of simple routine.

There is danger in this situation — grave danger — for the medical profession. Even worse — there is danger to the American way of life itself.

Today we say democracy — American democracy — is on trial. Too many are eager to testify for the prosecution; too few for the defense. Volumes are written on our mistakes, our shortcomings, our failures, our weaknesses. But our strength, our achievements, our greatness, our service — these are taken for granted.

Those on the side of the prosecution — those who wish to paint America black — wield a mighty brush, make no mistake. They know how to magnify every flaw out of all proportion to its size, and they know how to minimize every worthy thing we have done and are doing. It is their aim to becloud our vision of the future by cutting us off from the American past.

And in these ceaseless efforts they are succeeding to an extent which we cannot view with complacency. For they are clever. They are united in their aims — disciplined in their methods. In short, they are organized.

As a fundamental part of their strategy, these agitators insinuate that the individual must be regulated because he cannot be trusted.

Yes — this is, at bottom, the theory of those who would change — drastically change — our form of government.

The Record of Democracy

Now let us think about the opposite theory. Let's turn back to the time our country was founded. What is the feature of our Constitution which electrified the world, raised the spirits of the down-trodden everywhere, and caused tyrants to tremble? Simply the implied conviction that a citizen of our country is not a rascal. Neither is he a fool. He is, on the contrary, a man of essential goodness, capable of governing himself — and thus of playing a part in the government of his country.

In 1789 this was the most radical of all political theories. But on the basis of developments since then, I submit it has proven to be a workable theory.

We have blundered at times. We have stumbled and we have slipped. But we have always managed to keep our form of government in the midst of a world torn with revolution and littered with the ruins of fallen empires. Of late we have even been able to contribute very materially to the support of those governments which pronounce our political procedure unsound and impractical.

The critics, the prosecutors, the detractors of the American way have no answer for this record of achievement — so they choose to ignore it or — still worse — to falsify it.

They picture the free enterprisers of our past — our pioneer Americans — as ruthless barbarians — without principle, without mercy. Does this portrait bear any resemblance to the men it represents?

Was selfishness, greed, treachery, the stamp of the pioneer who plodded the overland trail to California, to Oregon or to the points between? Does the record show that our pioneers lived under the jungle code of every man for himself? Indeed, no!

Cooperation among individuals — organization if you will — attained its highest expression among the wagon trains on the Overland Trail, among the early settlers of the prairies, among the ranchers and herders, wild-catters and gold-seekers of the pioneer West. To be sure, this cooperation was not enforced with directives. It was not planned by a Washington bureau. It did not involve the filling out of notarized forms. It was not recorded and itemized in statistics and surveys. It simply existed everywhere, and was expected everywhere.

The cooperation of the pioneers was the voluntary act of resourceful individualists, not the empty minded obedience of cringing collectivists. For our pioneers were the kind of people who could follow the path of duty without the aid of road maps supplied by some Washington bureau.

In the strange new world these pioneers elected to invade, all the forces of nature were pitted against them. In the desert, in the mountains, on the trackless plains — death by starvation, by thirst, by flood and fire, by blizzard and cyclone, were daily threats.

Who could hope to go it alone in such an environment? Who could take an abstract view of the subject of organization or calmly debate the worth of cooperation with his neighbors? Then it was organize or die, cooperate or perish.

It is still that way today, but in a different sense — if we could only see it. For the death of our democratic way of life would mean the death of each of us — or, at least, a life so bitter that total extinction would come as a release.

Some critics tell us we cannot live now as our ancestors did because today life is more difficult. Vountary cooperation won't work any more, they say, because we can't have security now unless the government gives it to us.

But, may I ask, what kind of security did the pioneers of America have? Who guaranteed them against the risks of famine and drought, of storm and fire, of blizzard and cyclone, of Indian raid and outlaw gang? What kind of security did they have except the security of trusting in the cooperation

of their neighbors as neighbors trusted in their cooperation?

Voluntary Cooperation of Free Men

Do the critics of our way of life maintain that we are an altogether different breed from these Americans of a century ago? And if they do — is it true?

The record of the recent war tells me that the American people have not changed. They have the same courage, the same ideals — even though sometimes they have been misled as how best to attain them.

And I know our democracy can win through in its present trial in the same way our pioneer ancestors met all the trials of their daily life — by the voluntary cooperation of free men.

What better vehicle is there for this voluntary cooperation than such existing trade and professional associations as, just for example, the American Medical Association and the American Petroleum Institute?

Let us make no mistake about it — there is work to be done, and to be done now. We require no ringing of an alarm to tell us that. Each of us is now in as great a predicament as the pioneer who saw the prairie fire raging on every side of his cabin — or heard the shrill war whoop of Indian raiders.

The crisis is not coming. The crisis is here.

Let us consider the nature of this crisis, since it affects your profession and my industry, and the freedom of all of us.

From its very beginnings, scientific medicine has had to wage war on superstition and quackery in the treatment of human ills. Through your medical associations you have fought this dangerous superstition with valor and with marked success. You have exposed and checked the cancer quack, the glorified witch doctor, the peddlers of fake cure-alls, and others who fatten on human suffering.

But today there is another quack abroad in this country — a quack no less dangerous to those who value liberty as we value life. I refer to the quack in the field of economics.

We who are familiar with political economy know that enterprise, investment, production, and employment cannot be encouraged by taxing industry down to its blood, bones, and marrow or by regulating it to despair. We know, too, that government has no independent source of wealth; that it can spend only what it takes from the people. We also know that deficit financing is just an illusion, like those fake hair-growing lotions which, by tinting the fluff on a bald man's pate, give him the brief impression that he is cultivating a new set of luscious and curly locks.

We know these truths, but what good does just knowing them do? Of what use is a sound diagnosis if no attempt is made to treat the disease?

Economic Frauds Must Be Exposed

I would say that one of the most important tasks of American industry today is to spread economic truths to a public that is being drugged by economic fallacies. I would say that American industry must set about exposing economic frauds just as vigorously as your associations expose medical frauds.

In addition, both industry and the professions should make it a basic function to tell the story of their achievements to the American people. Let us face the fact that the slanders now being hurled against business and the professions have for their purpose the destruction of the American way of life. The authors of these slanders plan to effect this overthrow not by force and violence, but by the slow poison of propaganda. Yes, propaganda against the oil industry, against the medical profession, against private enterprise in all its forms.

This propaganda must be answered, vigorously and forcefully, with the truth — with the record of what we have done, and are doing, for the American people. Remember, if the private-enterprise system is overthrown, my business and your profession will be among the first to go because they are among the most solid props of the American system. Deprive us of freedom, and everyone's freedom is on the way out. This should explain why abuse and attack are directed at our activities by those who seek to crush, destroy, and root out democracy and the entire system of American free enterprise.

What more can we do now to meet the crisis which confronts your profession and my business? I hesitate to mention one except that it is so sadly neglected. This is the participation of all supporters of the private-enterprise system — of businessmen and professional men — in the affairs of their government on a local, state, and national basis. Not merely on issues directly affecting their own business or profession, but on all issues which, for better or worse, affect the future of our cherished heritage. This means, first, voting at all elections. Too many business and professional men neglect this elemental duty and privilege. But this is not enough. During, after, and between elections we should actively support those who are working to strengthen and defend our system — and just as vigorously we should oppose, and defeat, those who work against us.

There is only one way to save economic freedom in this country, and that is for each of us to be an active member of the rescue party. Which brings me to another fundamental obligation. It is not enough merely to tell the people what we believe.

continued on next page

We must show them what we believe — by our actions, by our attitude, by our display of faith and interest in the system under which we live.

The Responsibilities of the Individual

If each of us will accept the challenge that the public reputation of his profession depends to a very large extent upon his own personal conduct in that profession, then the agitators and the critics of the American way will soon be left with no scandals to proclaim.

Like it or not, we are judged by generalities — not by painstaking research. The average man judges the medical profession by the doctors he has known. He judges the oil industry by the oil men he has met.

And in the case of the activities of your profession and of the oil industry, the importance of receiving a favorable judgment cannot be over-emphasized. For we are both in an exposed position.

Industry, transportation, business, the military machine must have oil. Progress depends on oil and all mechanical activity requires lubrication.

As for you — your profession means life — and that statement requires no elaboration.

Should we oil men fall down on our job, and America's industrial machine falter or fail for lack of fuel — I dread to think of the criticism that would follow. And I dread it the more because this criticism would be deserved. Regardless of the circumstances, too many people depend upon the oil industry for us to have any excuse for failure.

Yes, oil must always be available to the American people, when they need it, where they need it. And medical care must be available, too. Your problems, your procedure, your objectives are different from ours, but your duty is the same. Your duty is the same with this exception — our work is concerned with material things, but yours with human life itself. Therefore, though our responsibility is great, yours is greater still. Yours is the greatest of all responsibilities.

How is this tremendous responsibility to be met? Let's just reflect for a moment on what is being done to meet it now. What is the result of the present voluntary cooperation of the American medical profession and the American public? Anyone who reads the record of recent years will find inscribed therein an account of humane progress unsurpassed in all the annals of civilization.

I am thinking now of the growth of just one voluntary health plan — the Blue Cross — from fewer than 12,000 members in 1934 to more than 30,000,000 Americans today. I am thinking of the employee medical programs which are now being provided by many corporations. I am thinking of the private organizations which have been formed to fight cancer, heart disease, tuberculosis, polio —

and many other ills which terrorize society. I am thinking of the blood banks and the mass chest X-ray programs.

Of course, these are inadequate. Of course, they are only a beginning on what needs to be done — but what a beginning! The time is now in sight when every American can feel assured that no barrier of region or of means separates him from the best of medical care. And how much more to your credit and to ours if we can achieve this ultimate ideal in the American way — the way of voluntary cooperation among free men.

I have said democracy is on trial. Actually, it is we who are on trial. If we succeed in fulfilling the responsibility fate has placed upon us. I do not see how democracy can fail. For, after all, we — each of us — are the parts which make up democracy. And if the parts are sound and true, the whole must endure.

In the second century, a young pagan of the Roman Empire noted the strangely different attitude of members of the rising Christian sect and observed: "See how these Christians love one another." Soon he too was converted to Christianity — not by sermons and tracts, but by example. He did not have to be lectured on what the Christians believed. He saw for himself what they believed — and how faithfully they practiced their belief.

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DYNAMIC DEMOCRACY

*"... Why, the great majority of my friends —
not all of them ... confuse dynamic democra-
cy with socialism ..."*

Thus did the majority leader of the House of Representatives in Congress defend the President's reorganization plan No. 27 to create a department of health, education and security against the attacks of those Congressmen who pointed out in no uncertain terms the bureaucratic and socialist aims imbedded in the proposed legislation. Dynamic democracy or socialism, the two now become synonymous if we accept the majority leader's explanations, was defeated by a 249 to 71 vote.

Among the 71 who supported the President's program of "Dynamic Democracy," we regret to report, was Congressman Aime J. Forand, Congressman from the first Rhode Island district.

Reorganization Plan No. 27, submitted by President Truman on May 31, would have established a Department of Health, Education, and Security. All agencies of the Federal Security Agency, together with their respective functions, records, property, personnel, etc. would be transferred to the new Department.

The Department would be headed by a Secretary of Health, Education, and Security to be appointed by the President with the consent of the Senate and to whom the functions of the present Federal Security Administrator (Oscar Ewing) would be transferred. Three major bureaus in the new Department would have corresponded to the three

major units of the present Federal Security Agency.

The Plan differed from the reorganization plan No. 1 that was rejected by the Senate chiefly in a change of the name of the new department, and in the retention of autonomous powers of the Public Health Service and the Office of Education.

The only point at which Plan No. 27 touched the program of the Hoover Commission was in its creation of a new department, but that department would *not* be that which was recommended by the Hoover Commission. A major point of difference from the Hoover Commission program was the inclusion of health functions in a department with education and social welfare.

The American Medical Association, as did the Rhode Island Medical Society, opposed Plan No. 27. Reasons were many. The plan was in direct conflict with the recommendations of the Hoover Commission: it would render more difficult or impossible the creation of a department of Health at any future time; it would not have been a reorganization of administration, but a renaming of an agency admittedly faulty in setup; it would point toward eventual Federal domination of our voluntary hospital system; it would create a master organization ready and anxious to take over administration of a national compulsory health insurance program, and it would place the administration of the Nation's health activities in the hands of a politically appointed secretary with no professional qualifications.

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But read what some of the Congressmen had to say about this socialistic — pardon us, "Dynamic Democracy" — program —

Hon. R. F. Rich, of Pennsylvania —

"... It is about time that we took an inventory here. This thing is so terribly bad that the American people will wake up in a short time and they will find out that instead of having a country where we have our freedom and our liberty and independence, we will have a land of socialism and a land of dictatorship."

Hon. L. C. Arends, of Illinois —

"Instead of reducing expenditures this plan will lead to increased spending. Instead of less government, this plan proposes more government. Instead of promoting efficiency this plan will bring about political control in those fields, such as education and public health, where there should be a minimum of such control."

"... There is hardly any doubt that Mr. Ewing will use the prestige and influence of his new rank of Secretary in the President's cabinet to promote the socialized medicine program he has been vigorously advocating as Federal Security Administrator."

Hon. C. D. Kearns, of Pennsylvania —

"I am becoming a little fed up with plans. There are plans for the farmer; there are plans for labor; there are plans for little business; there are plans for minority groups — there are plans for every single group which seems to hold promise of a block of votes."

RHODE ISLAND MEDICAL JOURNAL

"Plan No. 27 is not good for the public school system of the United States. It gives to the Secretary of Health, Education and Security the authority to transfer United States Office of Education personnel, records, and funds. In short, plan No. 27 puts the present administration on top of the budget and the personnel of the United States Office of Education."

Hon. C. J. Brown, of Ohio —

"We found some strange things in our studies of the Federal Security Agency."

"We also found a great deal of inefficiency, waste, and extravagance. Our findings (The Hoover Commission) have been fully supported in just the last 2 or 3 weeks, by a report of a subcommittee of the House Committee on Post Office and Civil Service..."

"For instance, we found in one social security office or division several thousand Government employees patiently and faithfully keeping records which the law had not required to be kept for many years. There were five or six thousand employees who were not needed at all."

But all this, the majority leader of the House, Congressman J. W. McCormack of Massachusetts, apparently considers "dynamic democracy," and not socialism.

From where we sit on the sideline we venture the opinion that the real dynamic Democracy in Congress was demonstrated by the 249 Congressmen who denounced Plan No. 27 for the political promotion scheme it was.

HOSPITALS AND THE PRACTICE OF MEDICINE

The announcement by Dr. Charles J. Ashworth, president of the Rhode Island Medical Society, that Dr. Elmer Hess, author of the Hess Report on hospitals and the practice of medicine, will address the Society at its midwinter meeting in Woonsocket on December 13th should interest every physician in this area. Certainly the meeting will draw an attendance of many doctors from our neighboring states.

Physicians in their relationships with hospitals must be guided not only by the laws of the various states, but also by the principles of medical ethics of the American Medical Association. The state laws for the most part rule as illegal the corporate practice of medicine. The classic example of such illegal practice given by the courts is the instance in which a corporation hires a professional man and then sells his services to the public on a fee basis for the profit of the corporation.

In its code of ethics the AMA sets forth that **"a physician should not dispose of his professional attainments or services to any hospital, law body, organization, group or individual,**

by whatever name called, or however organized, under terms or conditions which permit exploitation of the services of the physician for the financial profit of the agency concerned. Such a procedure is beneath the dignity of professional practice and is harmful alike to the profession of medicine and the welfare of the people."

Another matter brought out in the Hess report is that of the principles of relationship between hospitals, radiologists, anesthetists, and pathologists. These principles emphasize that the primary obligation of both physicians and hospitals is to serve the best interest of the patients. This leads to the fundamental principle that the decision as to the ethical or unethical nature of practice must be based on the ultimate effect for good or ill on the public as a whole. Thus, in the final analysis local conditions must decide the various arrangements and conditions of practice in reference to both hospital facilities and medical personnel and their relationships, with the patient as the prime beneficiary.

In its report to the Board of Trustees of the AMA the Committee on Hospitals and the Practice of Medicine pointed out that

"there can be no exploitation of the doctor or of the hospital if everyone concerned in management and on the professional staff will work together to supply the greatest possible good quality medical and hospital services of the public. In any given controversy every effort should be made to settle the matter at the staff-management level. In case of failure to settle the controversy at this level, the assistance of county (or district) medical society should be requested. If, then, it cannot be resolved it should be submitted to a committee of the state medical society for advice and recommendation. If problems cannot be solved ... the Constitution and By-Laws of the American Medical Association provides that ... the Judicial Council may, at its discretion, investigate general professional conditions ... and make such recommendations to the House of Delegates or the constituent association as it deems necessary."

The House of Delegates of our Society has already given support to the establishment of district committees as well as a state committee on hospital and professional relations. Several of the district societies have already named their committees, the chairman of each to be a member of the state society group. Those district societies that have not acted on this matter should do so in order that the proper mechanism may be established to improve the physician-hospital patient relationships.

Not publicized widely, but nevertheless significantly noted in the report adopted by the AMA

delegates as submitted by the committee, were some noteworthy suggestions offered as additional guides to physicians, county medical societies, and state medical associations, as follows:

1. That the costs of medical services rendered in hospitals be separated from the non-medical costs, as can be done by existing and accepted methods of cost accounting, and that they appear thus separated on the statement submitted to the patient.
2. That a physician should not dispose of his professional attainments or services to any hospital, lay body, organization, group or individual, by whatever name called, or however organized, under terms or conditions which permit exploitation of the services of the physician for the financial profit of the agency concerned. Contrariwise the physician should not exploit the hospital. It is the sense of this Committee that neither hospital nor physician rendering the service shall exploit the patient or each other.
3. That fees for medical services which are collected by a hospital should be established by joint action of a representative committee of the staff to include the head of the department, and the administrator and the governing body of the hospital.
4. That the basis of financial arrangement between hospital and physician may be salary, commission, fees, or such other method as will best meet the local situation, consonant with the principles of medical ethics and with due regard to the needs of the patient, the community, the hospital and the physician.

PROPAGANDA

THE SOCIAL PLANNERS have been in the forefront in condemning the national education campaign of the American Medical Association. In spite of all the name calling, however, we have yet to read any sound refutation of the facts presented by the AMA. The educational campaign has been aimed at one general purpose — get the true story to the people of the country in order to counteract the propaganda of the political and socialistic groups who use the cry of government health insurance as a means to advance their own selfish interests.

The physicians of America would welcome, and we are sure every citizen would, factual presentations devoid of emotional arguments regarding any national issue, whether it be compulsory health insurance or anything else. To prove their belief the physicians have carried on their educational campaign, distributing literature that will stand up against criticism as to the validity of its content.

The best proof that the doctors' educational campaign has won approval is evidenced by the attempt now of the Democratic National Committee to flood the country with its booklet entitled "Better Medical Care that YOU Can Afford." This booklet subtly uses picture drawings and generalizations in its captions to win support for the Democratic party politicians by offering as bait a supposedly low cost compulsory health insurance program.

The brochure certainly wanders from the path of fact and truth when it compares government controlled health insurance through taxation with accident and health insurance as the people of this country understand that type of voluntary coverage.

One of the most damning parts of the booklet is the statement that "No worker would pay more than \$6 a month." This is both misleading, and downright false in its implication. No mention is made of the increase in general taxes since the

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proposal calls for use of general tax funds to meet any deficiencies. Likewise, the statement that the worker will be taxed only 1½% of his earnings does not carry the additional warning that in subsequent years the tax may be increased.

The Pawtucket Medical Association has taken a definite stand on the issuance of this political booklet of misstatements in letters to the Rhode Island members of Congress. The other district societies will do well to let local, state, and federal officeholders know that the use of such propaganda in this State will meet a strong counter-attack from the physicians of their respective areas.

Compulsory health insurance is not a part of the Democratic National party's platform. The endorsement of President Truman's plan by the national committee was not a unanimous decision. The sale and distribution of propaganda by the national committee to service its own personal aims should prove revolting to every follower of the Democratic Party in Rhode Island.

THE CHAPIN ORATION

We are pleased to print in this number of the Journal the Chapin Oration delivered at the annual meeting of the Society by Dr. James L. Gamble of the Harvard Medical School.

Physical chemistry has played an increasingly large part in medicine during the last half century. We think it is safe to say that up to that time even many of the leaders of medicine had slight knowledge of chemistry. Lawrence Henderson was one of the pioneers in this change over, and we have heard him characterized as a philosopher in chemistry. Dr. Gamble was one of the young men who early recognized the importance of the new trend, and his work through all these years has been concentrated to a large extent on chemical problems particularly as they are related to the body fluids.

He has not allowed himself to take merely close-up views of many minor details but relates it all to the development of animal life through the geological epochs. In talking to us, he set himself the difficult task of presenting in a simplified yet intelligent manner, an over all picture of the slow development of the body chemistry. He has refrained from giving us a lot of details which some of us would be inadequate to comprehend.

We feel that Dr. Tom Spies adopted a somewhat similar method when he discussed vitamins in his Oration last year. Despite the lucidity of Dr. Gamble's paper, it is not such that it is easy to comprehend at a single hearing. We think that you will be entertained as well as instructed if you read it.



Peter Pineo Chase, M.D., (left) President of the Rhode Island Medical Society, 1949-50, views the Dr. Charles V. Chapin Medal with the 1950 recipient, Dr. Gamble of Boston.

MEDICINE'S CONCERN ABOUT LICENSURE OF MEDICAL RECORD LIBRARIANS

concluded from page 410

ment to the Constitution and By-laws of the American Association of Medical Record Librarians in order to effectively guard your interests after 1954.

The A. M. A. Council on Medical Education and Hospitals will be unlikely to make any further changes for some time and I believe that they consider it likely that any one of you now possessing the qualifications to be a Director of a school will have ample time to consummate that desire, if ever, in the period remaining before more stringent rules apply.

I have been closely associated with medical licensure and I am quite in accord with high and rigid standards so long as they provide for the inclusion of those already licensed and the protection of the rights already enjoyed.

Medicine has a task ahead — to restore the prestige of the general practitioner — to find a place for him on his local hospital staff — and to see to it that the Specialist is a true Specialist — not just an exclusionist.

Nursing and the ancillary services also need to watch the trends and not allow the pendulum to swing too far. The welfare of the public demands it. *We can't have all generals in the army of health care.*

You have a problem in controlling the tides that engulf you, but I am sure that by concerted and determined effort you will control your destiny, and I wish you well.

"Of 428 cases [of seasonal rhinitis and perennial rhinitis of allergic origin], 60% to 76% were benefited."

NOTE: A table, listing the results obtained in hay fever, shows that Hydryllin was used by ninety-seven patients and that 73 per cent experienced from 50 to 100 per cent benefit.

Gay, L. N.; Landau, S. W.; Carliner, P. E.; Davidson, N. S.; Furstenberg, F. F.; Herman, N. B.; Nelson, W. H.; Parsons, J. W., and Winkewer, W. W.: Comparative Study of Antihistamine Substances: III. Clinical Observations, Bull. Johns Hopkins Hospital 83:356 (Oct.) 1948.

In hay fever, asthma and other allergic manifestations, the clinical effectiveness of Hydryllin and its relative freedom from side reactions has been amply demonstrated. Hydryllin not only furnishes an active antihistaminic principle but also the stimulating, antispasmodic and spasmolytic effects of Searle Aminophyllin.

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THE AMERICAN MEDICAL ASSOCIATION

Report of Delegate to the Annual Sessions of the

American Medical Association at San Francisco, June, 1950

THE American Medical Association held its 1950 Annual Convention at San Francisco, California, June 26 to 30. Over ten thousand physicians attended the convention; nine physicians were registered from Rhode Island.

Your delegate attended all sessions of the House of Delegates, and the alternate delegate and vice-president of the State Society attended the important sessions of the House and several Reference Committee meetings. Your delegate and alternate also attended the round-table conference on legal matters by the counsels of the various state societies of the AMA.

Some highlights of the sessions were as follows:

1. Membership dues were set at \$25 for the coming year and subscription to the AMA Journal was included in the dues.
2. It was suggested that state examining boards accept International Refugee Organizations' certification in lieu of other evidence of graduation and professional status for displaced physicians.
3. Approved the formation of a General Practice Section in hospitals, and approved the manual of the American Academy of General Practice for use by the general practice section in hospitals.
4. Recognized the need for, and approved the formation of, a medical student organization. Disapproved the present Association of Interns and Medical Students.
5. Distributed a report of an exhaustive study of medical education and medical plans in Great Britain which will be published in full in the AMA Journal in serial form beginning shortly.
6. Approved the expansion of the Washington office.
7. Disapproved the issuance of a separate Bulletin for the Women's Auxiliary.
8. Accepted the treasurer's and auditor's report.
9. Approved plans of the National Education Campaign.
10. Referred to the Board of Trustees reports on cost of medical care, and the survey of cults.
11. Decided status of Department of Racial Discrimination is one for several states to handle.
12. Discussed at great length the problems relating to Veterans' Medical Care and could come to no satisfactory conclusion, so voted to table the matter for further study and report at the Interim session.
13. Approved the inclusion of nursing services in prepayment plans.
14. Approved the report of the Commission on Chronic Illness.
15. Rejected the New Jersey plan for medical care because of too many controversial issues, but commended New Jersey and stated the plan had many sound principles.
16. Approved income tax exemption for post-graduate study.
17. Opposed reorganization Plan No. 27 as proposed to the U. S. Congress.
18. Opposed Medical Care plans now in Congress as well as federal aid to medical schools.
19. Authorized a study committee to augment the twelve-point plan of the American Medical Association.
20. Suggested enabling legislation for federal emergency medical service.
21. Stated that medical care for members of the United States armed forces was the government responsibility only, and this does not include their families. The report was referred to the Board of Trustees.
22. Set the Interim Session at Cleveland in December, 1950.

One of the most controversial issues before the convention was the report of the Committee on Hospitals and the Practice of Medicine. This committee, which is now called the Correlating Committee on Extension of Hospitals and Other Facilities of the Council on Medical Service, incorporated some of the previous Hess report on hospitals and practice of medicine. Some parts of the report were deleted and some changed. This report evoked so much discussion and so much parliamentary debate and argument that the House ordered it printed. Therefore, a detailed discussion on this section of House activities will be deferred until the official transcript of what actually took place is received.

continued on page 422



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Flavored. pH 6.4. For Doctor's Office and
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REPORT OF AMA DELEGATE

concluded from page 420

Your delegate takes this opportunity to remind all members of the Society that the problems of medical care and the business of the state societies is assuming a larger importance in every passing month, and that one delegate to the National Convention for any state is totally insufficient. Without the able assistance and cooperation of the President and Vice-President of the state society, proper attention to your affairs could not be given because of overlapping schedules and the long meeting hours at these conventions. The state with one delegate is at a disadvantage, and the state's interest suffers as a result. It is to be hoped that legislation will be approved in the future whereby each state will have at least two delegates. Your sincere consideration of this problem is solicited.

CHARLES L. FARRELL, M.D.

AMERICAN DEMOCRACY ON TRIAL

concluded from page 414

Some day I hope an observer in this country will exclaim with equal admiration: "See how these doctors and these oil men love their democracy" — judging us by our actions, and not by our claims.

And when the day comes that this is said not of us alone, but of more Americans, on that day the future of American democracy will be assured.



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**Trade-mark of Merck & Co., Inc.
for its brand of cortisone.*

THE CARE OF HAND INJURIES

The 4th in a series of articles prepared by the American Society for Surgery of the Hand, and distributed by the Committee on Trauma, American College of Surgeons

IV

LACERATED WOUNDS

I *Protection of the Hand* (Abstract of Article I)

The first-aid care of wounds of the hand is directed fundamentally at protection. It should provide protection from infection, from added injury, and from future disability and deformity. The best first-aid management consists in the application of a sterile protective dressing, a firm compression bandage and immobilization by splinting in the position of function*. No attempt should be made to examine, cleanse, or treat the wound until operating room facilities are available.

II *Requirements of Early Definitive Treatment* (Abstract of Article II)

Early definitive care requires thorough evaluation of the injury with respect to its cause, time of occurrence, status as regards infection, nature of first-aid treatment and appraisal of structural damage. For undertaking the definitive treatment the conditions required are a well-equipped operating room, good lighting, adequate instruments, sufficient assistance, complete anesthesia, and a bloodless field. Treatment itself consists of aseptic cleansing of the wound, removal of devitalized tissue and foreign material (exercising strict conservation of all viable tissue), complete hemostasis, and the repair of injured structures, to be followed by protective dressing to maintain the optimum position. After-treatment consists of protection, rest and elevation during healing, and early restoration of function by directed active motion.

III *Surface Injuries* (Previously circulated)

IV *Lacerated Wounds*

Lacerations may damage skin, fat, fascia, muscles, tendons, tendon sheaths, blood vessels, nerves and, more rarely, joint or bone. The treatment of such injuries has four objectives:

1. Protection from infection.
2. Restoration of structures.
3. Avoidance of deformity.
4. Early restoration of function.

* Position of function or position of grasp: wrist hyper-extended in cock-up position; fingers in mid-flexion and separated; thumb abducted and in mid-flexion, with tip pointing toward little finger.

These objectives are furthered by proper first-aid care, as outlined in I (*Protection of the Hand*) and by definite treatment.

A — Definite Treatment

To be undertaken only under the proper conditions and according to the principles outlined in II (*Requirements of Early Definitive Treatment*). Careful history of the injury should be followed by examination of the hand to determine:

- (1) Location and extent of the wound.
- (2) Source of major bleeding.
- (3) Presence of foreign material.
- (4) Function of tendons, to be tested *against resistance*.
- (5) Function of intrinsic muscles.
- (6) Condition of nerves as regards both sensory and motor functions.
- (7) Integrity of bone and joint.

Following anesthetization of the patient and application of hemostatic blood pressure cuff (not to be inflated above 300 mm), definitive treatment of the wound consists of:

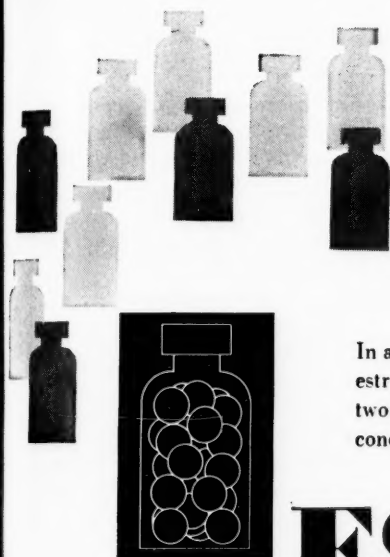
- (1) Thorough cleansing of wound region and then of entire hand and forearm with soap and water or bland detergent.
- (2) Removal of foreign material from the wound.
- (3) Careful, gentle, thorough, but conservative excision of devitalized tissues, sparing all structures that may survive.
- (4) Repeated cleansing of wound by irrigation with warm normal saline solution.
- (5) Securing and ligation of divided blood vessels.

These general measures are followed in appropriate cases by repair of damaged structures. Proper wounds for this repair are:

- (1) Those in which infection has not become established.
- (2) Those not grossly contaminated by highly infective material.
- (3) Relatively clean wounds not more than three or four hours old.

In general, wounds not fulfilling these criteria

continued on page 426



10

Estrogens were compared

In a recent clinical comparison of ten estrogens administered by various routes to two hundred menopausal women, the conclusion was reached that:

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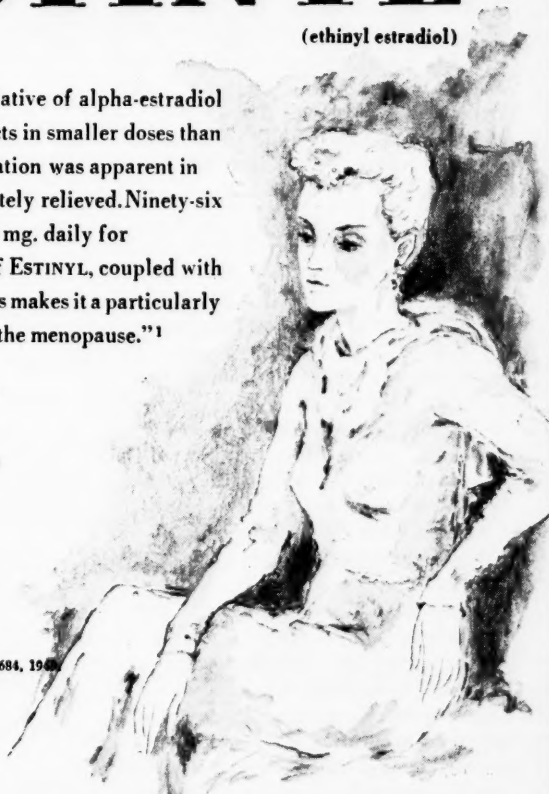
DOSAGE:

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1. Perloff, W. H.: Am. J. Obst. & Gynec. 58:684, 1949



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ESTINYL

CARE OF HAND INJURIES

continued from page 424

are better left unrepaired to await secondary closure and later reconstructive surgery. They should, nevertheless, be as carefully cleansed of foreign matter and dead tissue as are those prepared for primary closure. In such cases severed nerve ends may be identified with nonabsorbable sutures or lightly united.

Repair of damaged structures:

(1) Nerves

- a. All severed nerves should be repaired, including the digital nerves.
- b. Fine arterial silk on fine needles should be used, accurately approximating the nerve ends by small interrupted sutures placed around the periphery. These sutures should include only the perineurium, not the nerve bundles. It is important to avoid axial rotation, particularly in nerves having both motor and sensory function.
- c. Nerves are to be distinguished from tendons, especially at the wrist, by their anatomical position, softer texture, pinker color, small surface capillaries, and distinct nerve bundles seen on cut ends. Pulling on a nerve will not flex a finger.
- d. Nerves should be handled gently, never crushed, rubbed, or allowed to become dry.

(2) Tendons

- a. All severed tendons should be repaired, including the tendons of intrinsic muscles.
An important exception to this rule concerns flexor tendons severed within the flexor sheath or in the digital flexor canal. Primary suturing of the flexor profundus in this location rarely succeeds in restoring useful function even if the flexor sublimis is removed. Suturing both flexor sublimis and profundus in this area almost invariably results in failure. Should even minor infection occur, failure is assured. With rare exceptions, it is sound practice to repair the skin and digital nerves only, leaving the flexor tendons for secondary reconstruction when severed in this region.
- b. Nonabsorbable sutures of silk or wire are used accurately to approximate the severed tendon ends after they have been cleanly squared off with a sharp knife.
- c. Additional incisions to secure retracted tendon ends should follow flexion creases. They should be curved or transverse, never longitudinal, and never in the palmar or dorsal midline of a finger.

RHODE ISLAND MEDICAL JOURNAL

- d. Tendons should be handled gently; never crushed, rubbed, or allowed to become dry.

(3) Muscle

- a. Severed muscles should be lightly approximated with interrupted mattress sutures, avoiding tension and constriction.
- b. Muscle thus repaired should be alive, contractile and vascular, all devitalized shreds being trimmed away.

Following these procedures, the hemostatic blood pressure cuff is released to permit identification, control and ligation of bleeding vessels. The field should be dry before closure of the wound.

(4) Fascia

Severed fascial and ligamentous tissue should be repaired with interrupted mattress sutures, avoiding tension.

(5) Subcutaneous tissue

Subcutaneous fatty tissue may be lightly approximated with interrupted fine sutures.

(6) Skin

The skin should be closed with fine, non-absorbable sutures.

(7) Dressing

Firm pressure dressing is applied, the fingers being separated, with gauze between them. The hand is immobilized by splinting in the position of function, except when suture of severed tendons requires splinting in a position to insure the least strain on their suture lines. If nerves have been severed, the position of function is particularly important to prevent deformity due to contracture of active muscles when their opponents are denervated and paralyzed.

B — Aftercare

- (1) Antibiotics and tetanus antitoxin (or toxoid) are administered systemically as prophylaxis against infection.
- (2) The extremity is kept elevated for the first three or four days.
- (3) Dressings are not removed for several days, usually one week, unless infection develops.
- (4) The healing of severed tendons and nerves requires three weeks of uninterrupted immobilization.
- (5) When nerves are severed, corrective splinting is necessary until reinnervation of paralyzed muscles has occurred.
- (6) Restoration of function is best secured, after healing, by directed voluntary exercise and appropriate occupational therapy.

SURGEONS TO MEET IN BOSTON ON OCTOBER 23

Dr. Arthur W. Allen of Boston is Chairman of the Board of Regents and Dr. Frederick A. Collier of Ann Arbor is President of the American College of Surgeons. Dr. Thomas H. Lanman is Chairman of the Boston Committee on Arrangements for the 1950 Clinical Congress. At the Presidential Meeting on Monday evening, October 23, Dr. Henry W. Cave of New York will be installed as President, and Dr. Warren H. Cole of Chicago and Dr. G. Gavin Miller of Montreal as First and Second Vice Presidents respectively.

The American College of Surgeons was founded in 1913 by surgeons of the United States and Canada and now has a total fellowship of 15,500. Several hundred new Fellows will be admitted at the 1950 Convocation on the evening of October 27 during the Clinical Congress in Boston.

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OPERATION OF MEDICAL DIATHERMY EQUIPMENT

Regulations of the Federal Communications Commission

Many members of the Society have made inquiry relative to the operation of diathermy equipment in view of regulations adopted by the Federal Communications Commission.

Equipment manufactured prior to July 1, 1947, may be operated until June 30, 1952, without type approval or certification, provided such operation complies with the requirements of Section 18.51 (see below). After June 30, 1952, type approval or certification will be necessary for the continued use of such equipment.

Section 18.11 and 18.12, stated in full below, outline the provisions governing the operation of diathermy equipment designed to operate within the allocated bands and outside the allocated bands respectively. *Present equipment may be operated after June 30, 1952, provided such operation complies with the provisions of either section 18.11 or 18.12.*

Operation Without a License — Medical Diathermy Equipment

Sec. 18.11

OPERATION WITHIN ASSIGNED FREQUENCY BANDS.

A station license is not required for the operation of medical diathermy equipment within assigned frequency bands provided such operation meets the following conditions:

(a) Such operation must conform to the general conditions of operation set out in the guarantee or certificate required by (c) and (d) of this Section. Operation must be confined to one or more of the bands of frequencies hereafter set forth:

Assigned band	Center frequency of channel	Tolerance from center frequency
13,553.22-13,566.78 kc	13,560 kc	± 6.78 kc
26,960.00-27,280.00 kc	27,120 kc	± 160.00 kc
40,660.00-40,700.00 kc	40,680 kc	± 20.00 kc

The operation of any medical diathermy equipment or device on frequencies other than those listed hereinabove shall be discontinued after the effective date of the Atlantic City Radio Regulations if interference be caused to any authorized services. However, in any event, operation of such devices on frequencies other than those listed above shall be discontinued after June 30, 1952, except as provided by Section 18.12.

(b) Such operation may be without regard to the type or power of emissions being radiated.

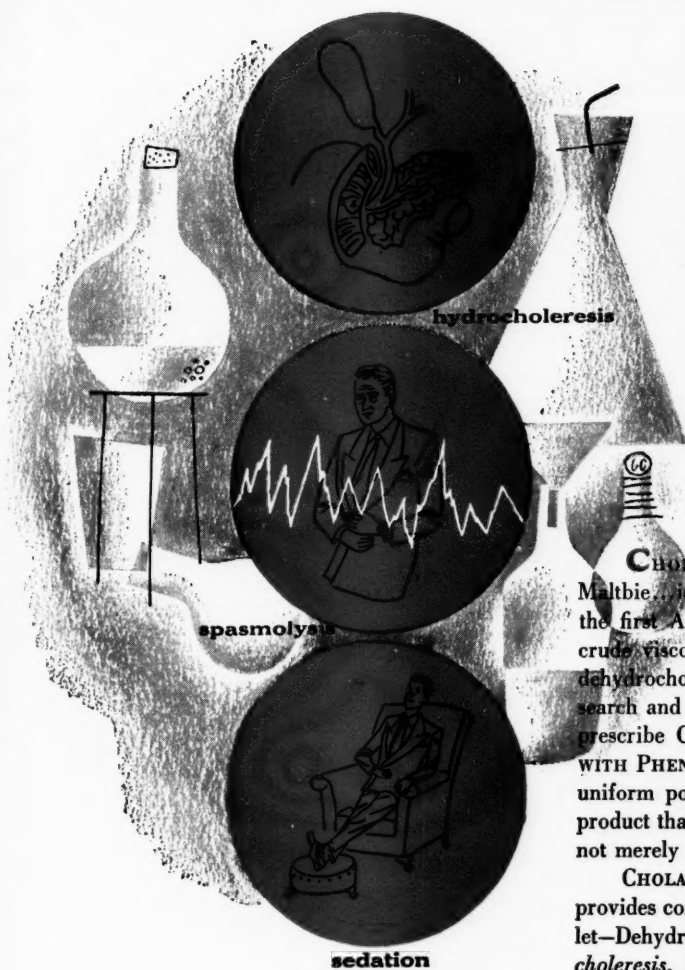
Spurious and harmonic radiations on frequencies other than those specified above shall be suppressed so that such radiations do not exceed a strength of 25 microvolts per meter at a distance of 1,000 feet or more from the medical diathermy equipment causing such radiations.

(c) With respect to equipment for which type approval has been received from the Commission in accordance with Sections 18.14-18.16 hereof there shall be affixed to each unit of equipment operated in accordance with (a) and (b) of this section, or posted in the room in which such operation occurs, a dated certificate of a competent engineer, or a dated certificate or name plate of the manufacturer of the equipment involved may reasonably be expected to meet the requirements of this section under the described conditions of operation for a period of at least three years. The certification required in this section shall describe with certainty the apparatus covered thereby.

(d) The owners or operators of equipment which has not received type approval but which is manufactured for operation without a license and designed to meet the technical requirements set forth under Paragraph 18.11 (a) and (b) shall have posted in the room in which such equipment is operated a dated certificate of a competent engineer, or a dated certificate or name plate of the manufacturer of the equipment, setting forth the general conditions under which such equipment should be operated and certifying that the equipment involved may reasonably be expected to meet the requirements of this section for a period of at least three years under the described conditions of operation. The certification required by this section shall describe with certainty the apparatus covered thereby, and shall include a brief statement of the engineering tests upon which such certification is based and the results thereof. Field intensity measurements in such tests shall be made in accordance with Section 18.13, below.

(e) No regular renewal of certification is required for equipment covered in (c) of this section. The certification required in (d) of this section shall be renewed at intervals of three years. Notwithstanding the above provisions with respect to renewal of certification, the certification required by (c) or (d) above shall be renewed for particular equipment by such date as the Commission

continued on page 430



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CHOLAN-HMB WITH PHENOBARBITAL provides comprehensive therapy in one tablet—Dehydrocholic Acid-Maltbie for *hydrocholeresis*, HMB (homatropine methylbromide) for *spasmolysis*, and phenobarbital for *sedation*.

CHOLAN-HMB WITH PHENOBARBITAL is indicated, in the absence of occlusive mechanical obstruction, in dyspepsia and constipation of biliary origin, biliary stasis, cholecystitis and cholangitis, biliary dyskinesia, and postoperative treatment.

Each **CHOLAN-HMB WITH PHENOBARBITAL** Tablet contains: Dehydrocholic Acid-Maltbie, $3\frac{3}{4}$ gr.; homatropine methylbromide, $1/24$ gr.; phenobarbital, $1/8$ gr.

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Cholan-HMB with Phenobarbital/ Tablets
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OPERATION OF MEDICAL DIATHERMY EQUIPMENT

concluded from page 428

may specify if the Commission has reason to believe that the operation of such equipment may be inconsistent with provisions of these rules or the source of interference to radio communication.

Sec. 18.12

OPERATION OUTSIDE OF ASSIGNED FREQUENCY BANDS

A station license is not required for the operation of medical diathermy equipment outside of the frequency bands specified in Section 18.11 (a) above provided such operation is in accordance with the general conditions of operation set out in the certification required in (c) below, and meets the following conditions:

(a) The equipment used in such operation shall be provided with a rectified and filtered plate power supply, power line filters, and shall be operated in a completely shielded room or space.

(b) The emission of radiofrequency energy generated by such operation, including spurious and harmonic emissions, shall not exceed a strength in excess of 15 microvolts per meter at a distance of 1000 feet or more from the medical diathermy equipment on frequencies other than those specified in Section 18.11 (a) above.

(c) There shall be affixed to each unit of equipment so operated, or posted in the room in which such operation occurs, a dated certification of a competent engineer, or a dated certificate or name plate of the manufacturer of the equipment setting forth the general conditions under which such equipment should be operated and certifying that under the described conditions of operation the requirements of this section may reasonably be expected to be met for a period of at least three years. The certification required by this section shall describe with certainty the equipment covered thereby, and shall include a brief statement of the engineering tests upon which the certification is

RHODE ISLAND MEDICAL JOURNAL

based and the results thereof. Field intensity measurements in such tests shall be made in accordance with the provisions of Section 18.13, below.

(d) The certification required in (c) of this section shall be renewed every three years; *provided* that such certification shall be renewed for particular equipment by such earlier date as the Commission may specify if the Commission has reason to believe that the operation of such equipment may be inconsistent with the provisions of these rules or a source of interference to radio communication.

* * *

Sec. 18.51

EXISTING EQUIPMENT

The provisions of this Part shall not be applicable until June 30, 1952, to diathermy and industrial heating equipment, the manufacture and assembly of which was completed prior to July 1, 1947, nor shall they be applicable until April 30, 1953, to miscellaneous equipment, the manufacture and assembly of which was completed prior to April 30, 1948; Provided that the foregoing provisions of this section shall be applicable only if such steps as may be suitable under the circumstances are promptly taken to eliminate interference to authorized radio services resulting from the operation of equipment manufactured prior to the respective dates hereinabove set forth.

ANESTHETISTS ELECT

The Rhode Island Society of Anesthesiologists, most recent of the ASA component societies, having been chartered on June 12, elected new officers.

President.....Priscilla Sellman, M.D.
Vice-President.....Cecil Metcalf, M.D.
Treas. and Sec.....Edward Damarjian, M.D.

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RHODE ISLAND MEDICAL SOCIETY
ANNUAL REPORTS OF COMMITTEES, 1949-1950

Report of Organization Committee

THIS YEAR the Organization Committee set for its goal the policy of giving to every eligible doctor's wife in the State a personal invitation to join the Auxiliary.

At a luncheon meeting held at the Providence Plantations Club in December, the names of nearly 400 eligible potential members were divided among the committee according to medical districts. Since Providence had by far the largest number, a sub-committee was formed and the names were again divided to spread the work among a larger group. Likewise, in other districts, similar methods of personal contact were adopted.

The committee is pleased to report the number of doctors' wives who accepted, according to medical districts, as follows:

Kent	4
Newport	6
Pawtucket	11
Providence	70
Washington	11
	102
Total new members	102

It is with sincere thanks to the members of this committee and to all who assisted in bringing new members to the Auxiliary that this report is presented.

Respectively submitted,

MRS. J. MURRAY BEARDSLEY, *Chairman*

MRS. ROYAL C. HUDSON — *Kent*

MRS. RICHARD RICE — *Newport*

MRS. EDWIN F. LOVERING — *Pawtucket*

MRS. THOMAS PERRY, JR. — *Providence*

MRS. HARTFORD P. GONGAWARE —
Washington

MRS. HARRY LEVINE — *Woonsocket*

Report of Editorial Committee

Since the duty assigned to the Editorial Committee has been to take care of newspaper publicity for the meetings of the Auxiliary, it has not been necessary for us to hold committee meetings. The work of the committee has been materially lightened because of the publicity arranged by Mr. John E.

Farrell, the able Executive Secretary of the Medical Society. Publicity for the Auxiliary meetings and a report of the fall meeting were given to the Providence Journal-Bulletin. Mrs. Henry J. Hanley took care of the publicity for the March meeting.

It has been a pleasure to me to have a share, although slight, in the activities of our Auxiliary.

Respectfully submitted,

MRS. PETER PINEO CHASE, *Chairman*

MRS. HENRY J. HANLEY

MRS. LOUIS I. KRAMER

Report of Public Relations Committee

The Public Relations Committee had no regular meetings; however, it was represented by the Chairman at a meeting of the Rhode Island Medical Society's Public Relations Committee. At this time, a representative of the American Medical Association spoke in opposition to compulsory health insurance and stressed the part that women can play by: (1) acquiring effective endorsement against compulsory health insurance, by organizations of various types; and (2) the importance of participation in the Medical Society's Speakers Bureau.

The Rhode Island Medical Society, in conjunction with the Auxiliary, offered a course to train doctors and doctors' wives to do public speaking in this connection. The following members of the Auxiliary to the Rhode Island Medical Society have completed this course: Mrs. Edward Famiglietti, Mrs. Arthur Hardy, Mrs. Joseph C. Johnson, Mrs. Arnold Porter, and Mrs. Frederick Webster.

"Capitol Clinics," a commentary on current legislation and federal activities, will be sent, gratis, to any interested Auxiliary member, if she will write to the American Medical Association, 1523 L Street, N. W., Washington 5, D. C., and ask to be put on the mailing list.

Respectfully submitted,

MRS. GEORGE E. BOWLES, *Chairman*

MRS. JARVIS D. CASE

MRS. EDMUND T. HACKMAN

MRS. HOWARD G. LASKEY

MRS. JOHN M. MALONE

continued on page 436



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DISTRICT MEDICAL SOCIETY MEETINGS

PAWTUCKET MEDICAL ASSOCIATION

The annual golf tournament of the Pawtucket Medical Association was held June 22, 1950, at the Pawtucket Golf Club.

The meeting was called to order by President, Dr. James P. Healy at 8 p. m. It was voted that letters be sent, through the Rhode Island Medical Society, to our Senators and Representatives voicing opposition to compulsory health insurance, and protesting distribution of a brochure by the Democratic National Committee describing National Health Insurance.

The meeting adjourned at 8:30 p. m.

Dinner was served. Attendance 27.

Respectfully submitted,

HRAD ZOLMIAN, M.D., *Secretary*

PAWTUCKET MEDICAL ASSOCIATION

The regular monthly meeting of the Pawtucket Medical Association was held in the Nurses dining room of Memorial Hospital May 18, 1950. Twenty members were present.

The meeting was called to order by President Dr. James P. Healey at 7:30 p. m. The minutes of the April meeting were read by the secretary and accepted.

Among many communications there were the following:

1. A letter from the Army Surgeon-General's office concerning a cut in intern and residency training programs due to a decrease in need for specialists. It was announced that appointments are available, however.

2. A pamphlet from the Federal Security Agency on a policy of the American Association of Registration Executives and Council on Vital Records regarding the confidential nature of birth records.

3. Letters on the "Grass Roots" obligation of physicians in the stand against socialization which kind of action contributed toward the victory of Representative Smathers in Florida recently.

4. An announcement and questionnaire of the American Diabetes Association on plans for the Diabetes week to be held in November, 1950.

Dr. Mara urged that doctors get out and support candidates who are against socialization of medicine.

Dr. Kelly made a motion which was passed that a committee on Diabetes be appointed consisting

of five members representative of the specialties.

Dr. Mara reported that the House of Delegates of the R. I. Medical Society went on record to keep the minimum for examination for insurance at \$10 and that physicians accept lower fees under protest. Motion was made by Dr. Kelly and passed that the Pawtucket Medical Association approve of this stand and send communications to that effect to the House of Delegates and to members of the Pawtucket Medical Association.

Dr. Mara made a motion which was passed that a committee be formed to study and revise the fee schedule, and also, to list each member of the Pawtucket Medical Association according to the type of practice in which he is engaged. Results of this study will be reported when feasible. He introduced the Michigan fee schedule for suggestions as to minimum fees and methods. He stated the second part of the motion would rate a man as to specialty recognized by and protected by the local group.

A motion by Dr. Kelly was passed that a committee of three be appointed to study and arrange for the handling of emergency calls, and to confer with a similar committee from the Caduceus Club.

Dr. Henry Hanley reported from the Benevolent Committee of the Rhode Island Medical Society which is to build a fund from contributions by members to aid indigent or disabled members.

The meeting retired to the auditorium where Dr. Harry Hecker spoke on "Some Implications of the New Hormones." He discussed the history of ACTH and Cortisone, metabolic effects, and practice use in some diseases, and especially in Rheumatoid Arthritis and Rheumatic Fever.

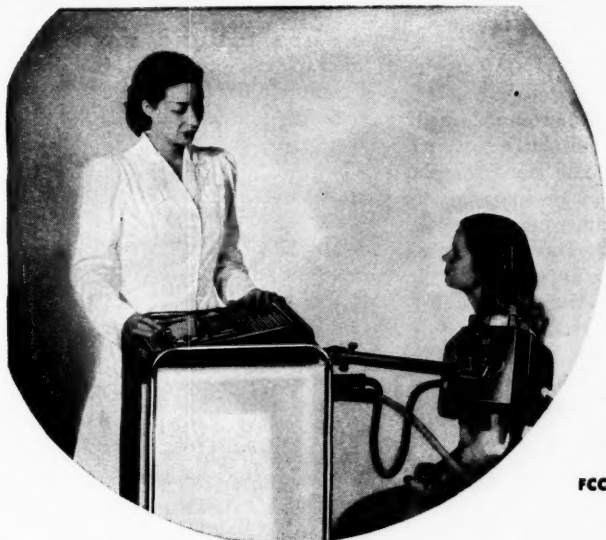
The meeting adjourned at 9:30 p. m.

Respectfully submitted,

HRAD ZOLMIAN, M.D., *Secretary*

KENNEY CLINIC — NOV. 1

Dr. M. A. Chapian, President of the Interns' Alumni Association of The Memorial Hospital, Pawtucket, Rhode Island, announces that The John F. Kenney Clinic Day will be held on Wednesday, November 1, 1950, and that the Guest Speakers for the Afternoon Session will be Dr. Frank H. Lahey and his associates. A detailed program will be published in the next issue of the JOURNAL.



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WOMAN'S AUXILIARY*concluded from page 432*

I am grateful for the assistance given me by my committee and for that of Mr. John E. Farrell, Executive Secretary of the Rhode Island Medical Society.

Respectfully submitted,
 MRS. WILLIAM P. DAVIS, *Chairman*
 MRS. HENRY B. FLETCHER
 MRS. MANTON C. GRIMES
 MRS. ARTHUR HARDY
 MRS. WILLIAM H. TULLY, JR.
 MRS. JAMES P. O'BRIEN
 MRS. HAROLD WOODCOME

Report of the Hospitality Committee

Our first meeting was held at the Rhode Island Medical Society Library on November 1, 1949. Doctors and their wives gathered after the meeting for a social hour. In keeping with the Halloween spirit we served doughnuts, cider, beer and cheese. If the chatter was any indication of a pleasant time, I feel sure they enjoyed it.

Our next meeting was a tea on March 14, 1950, at the Medical Society Library following a delightful talk by Dr. Dunlop. Tea and sandwiches were served with Mrs. Harris and Mrs. Farrell pouring. We were very happy to welcome so many old and new members at this meeting.

On May 10, 1950 we plan to have the Annual Luncheon Meeting to be held at the Agawam Hunt Club, Rumford, Rhode Island, and our earnest desire is to have a large group attend.

May I express my thanks and appreciation to the following ladies on my committee. They are:

MRS. WILLIAM N. HUGHES
 MRS. PAUL C. COOK
 MRS. NATHAN CHASET
 MRS. LOUIS CERRITTO
 MRS. GUY W. WELLS
 MRS. GEORGE W. WATERMAN
 MRS. JOHN G. WALSH
 MRS. HERMAN C. PITTS
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 MRS. GEORGE YOUNG
 MRS. CRAIG HOUSTON
 MRS. HENRY McDUFF
 MRS. JARVIS D. CASE
 MRS. HENRY J. TWEDDELL
 MRS. ERNEST K. LANDSTEINER
 MRS. STANLEY DAVIES
 MRS. FRANK W. DIMMITT
 MRS. GEORGE E. BOWLES

Respectfully submitted,

MRS. BERTRAM H. BUXTON, *Chairman*

Report of Legislative Committee

I am just as awed by the amount of medical, social and economic legislation under contemplation by our Government as I was a year ago when I first undertook to study the reports from the AMA Washington office. The AMA continues its campaign against socialized medicine; it not only opposes compulsory health insurance itself, but any bills that may establish precedences or aids for its inception. Among bills of this sort are the Corporate Health Act, National Health Act and National Health Insurance Act.

Republicans are demanding hearings on alternate health bills, as they argue the public should know what can be done to improve the nation's health services without the extremes advocated by the administration.

Although it passed the Senate last year, the School Health Bill is being delayed in the House and probably no action will be taken on it until Federal Aid to Medical Education and Local Public Health Units bills are disposed of. The AMA opposes one provision in the School bill—the authority to treat all children regardless of parents' ability to pay. The Local Units Bill, approved by the AMA for its local jurisdiction of health matters, will probably go through. Aid to Medical Education Bill is in executive Session of House Interstate and Foreign Commerce Committee.

There are 14 bills pending that supplement present authorized medical deductions and deductions of health expenses. AMA approves deductions for Voluntary Health Insurance.

The Social Security Amendments Bill, after weeks of hearings before the Senate Finance Committee, is in executive session in an attempt to arrive at an acceptable bill. The volume of testimony supported the opposition of AMA to total and permanent disability sections.

The Hospital Construction Program is in trouble

in two ways: it will be set back if the economy action of the House Appropriations Committee is sustained, and it is found to be relatively ineffective in getting hospitals built in the areas where need is admittedly greatest.

President Truman has passed up a Cabinet-Rank Department of Welfare this year.

National Organizations (Crippled Children and Adults) as well as federal government agencies are sponsoring legislation for the Handicapped, as services for such are becoming so expensive, extensive and inclusive.

The nationwide effort to familiarize all physicians with the medical aspects of atomic warfare is in full swing through a "filtering down" principle. Meanwhile scholarships go begging at the Atomic Energy Commission, affecting cancer research and other medical fields involving the use of radioactive isotopes. There is objection to FBI investigation of scholarship holders.

U. S. Public Health Service is cooperating with the State of N. Y. in a *chronic disease* "pilot operation," seeking cures. PHS also shows grants to states for general health, TB, mental health, cancer and venereal disease totaled 47 million.

Respectfully submitted,

MRS. H. FREDERICK STEPHENS, *Chairman*

MRS. LEE G. SANNELA

MRS. RAYMOND H. TROTT

MRS. HOWARD UMSTEAD

MRS. EDWARD B. MEDOFF

MRS. GEORGE L. YOUNG

MRS. DONALD FLETCHER

Report of Program Committee

The Program Committee of the Women's Auxiliary to the Rhode Island Medical Society wishes to present its Fourth Annual Report. The year has been a successful one due to the desire, on the part of the members, to acquaint themselves with the various fields in which the Auxiliary can be of help to the Community in Medical Progress.

Since the State of Rhode Island has no County Auxiliaries, the programs are confined to three State Meetings, yearly.

The Calendar:

November 1, 1949—8:30 p. m. . . . Medical Library. Combined Meeting R. I. Medical Society and Woman's Auxiliary.

Speaker: Marjorie Shearon, Ph.D., Washington, D. C.

Subject: "National Legislation Affecting Medicine, the Outlook of 1950."

March 14, 1950—2:00 p. m. . . . Medical Library.

Speaker: Edwin Dunlop, M.D., Fuller Memorial Hospital, North Attleboro, Massachusetts, formerly of London, England.

Subject: "Why I left English Medical Practice."

May 10, 1950—12:15 p. m. . . . Annual Meeting and Luncheon. Agawam Hunt Club.

Speaker: Mr. Thomas A. Hendricks, Secretary, Council on Medical Service, American Medical Association.

Subject: "The Woman's Auxiliary in Community Leadership."

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BOOK REVIEWS

A MANUAL OF CARDIOLOGY. By Thomas J. Dry, W. B. Saunders Company, Philadelphia, Pa., Second Edition, 1950. \$5.00

Thomas J. Dry has revised the first edition of his "Manual of Cardiology" with a definite plan in mind. He has done well in presenting in a concise manner the most recent concepts of cardiovascular disease, and in discarding textbook material which is obsolescent because of inaccuracy or irrelevancy.

The book develops in an efficient manner the latest beliefs, with particular stress on congenital anomalies, coronary artery disease, including acute myocardial infarction, subacute bacterial endocarditis and congestive failure. The introduction is concerned with a practical and usually neglected subject: the approach to the patient with cardiac symptoms. From there the chapters in logical sequence deal with the normal heart and fundamental considerations of heart disease with particular reference to the concepts of cardiac reserve, predominant ventricular strain and its application to clinical cardiology. Specific features to be looked for in order to make a diagnosis of heart disease: cardiac murmurs, abnormal pulsations, alterations in size and contours and disturbances in rate, rhythm and conduction are logically developed and sufficiently emphasized.

Electrocardiography receives its proper attention stressing the Wilson unipolar precordial leads in positions 1, 3 and 5 in conjunction with limb leads. Wider exploration and the employment of special leads is resorted to whenever the indications arise in the individual case.

Throughout the book the author demonstrates the ability to sift out all but the important material

and expresses himself in an impressive concise manner with sufficient stress on clinical approach. The bibliography is not exhaustive but contains the best references in the recent reviews. Scattered through the text are many helpful hints to therapy which are not always found in the usual texts.

The book is limited in scope as are all texts of its kind yet it is a valuable adjunct to the library.

ROBERT E. CARROLL, M.D.

AN ATLAS OF THE BLOOD AND BONE MARROW by R. Philip Custer. W. B. Saunders Company, Philadelphia, Pa., 1950. \$15.00.

As stated by the author, the general aim of this monograph is to promote accuracy in diagnosis of diseases of the Hemolytotoietic System. The greatest contribution of this book is its adequate presentation of the pathology of the bone marrow, fulfilling a need that has long been present. The author, an authority in this field, draws freely on his rich personal experience. The photomicrographs are numerous and excellent.

The findings in the peripheral blood, the clinical and adjunct laboratory manifestations, are sufficiently presented to complete the disease picture in each instance. This reference combined with one such as Clinical Hematology, by Maxwell M. Winrobe, supplement one another. They should be a part of the library of every doctor interested in diseases of the Hemolytotoietic System.

ROBERT J. WILLIAMS, M.D.
Pathologist

TEXTBOOK OF NEUROPATHOLOGY by Ben W. Lichtenstein, B.S., M.S., M.D. W. B. Saunders Co., Phil., 1949. \$9.50.

The history of books pertaining to Neuropathology which have been published in these United States begins in the early nineteen thirties. An increasing number of such books under different authorship have appeared since that time period. Lichtenstein's "Textbook of Neuropathology" is another example. This phenomena does not, unfortunately, indicate an increased interest in Neuropathology in this country. It means, merely, that there is a market for these books since the advent of the system of Specialty Board Examinations which have prescribed the course of training to be followed to achieve certification.

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Study of Neuropathology often, then, becomes a means to an end, rather than an end in itself. This book suffers as a consequence of this conception.

One chapter is devoted to pathogenesis. Herein, the concept of causation as being due to a factor or a sum of factors is elaborated. The concept of causation as an inter-reaction of several factors does not prevail. On the basis of this latter concept, one attempts to arrive at pathogenesis through regarding pathology as a "reaction." This trend pervades thinking in general pathology. This disharmony with general pathology obliges the author to fall back on a morphological approach in organizing the material.

Three chapters headed "Degeneration" follow the chapter headed "Pathogenesis." The term "degeneration" carries from the past, the connotation of pathogenesis. Even though the word be given a morphological connotation solely, then the author is disregarding the existence of a reaction to injury, whatever that injury may be. This makes for confusion and this confusion is ironical, since the author indicates a preoccupation with nomenclature.

There is little attention to histopathology, which is so relevant in studying the reactions of the nervous system to injury. One glaring error under the classification of "histopathology" occurs on Page 11. A reaction of astrocytes to injury is pictured, rather than a normal protoplasmic astrocyte, as the designation indicates. On Page 265, similar cells are pictured and labelled as an example of protoplasmic astrocytoma. The references at the end of the chapters are useful and well done. A unique feature of the book, that of listing and describing neurological syndromes, is to be commended. For purposes of ready reference, this listing is ideal.

The publisher should be commended on the easy readability and pleasantness of the type. The illustrations are well produced.

HAROLD W. WILLIAMS, M.D.

THE MERCK MANUAL. 8th ed. Rahway, N. J., 1950. Regular Edition, \$4.50; Thumb-Index, \$5.00.

The Golden Anniversary Eighth Edition of the excellent Manual contains over 1500 pages of condensed, readily available medical information for the practicing physician. Revisions and additions were made to the material up until May 1, 1950, the day it went to press, so that the very latest developments in therapeutics could be included.

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